

What is a solid-state battery summit?

This unique summit will cover the global solid-state battery ecosystem from multiple angles including advances in chemistry, engineering and safety as well as cost control strategies by manufacturers with an outlook on the forecasted market expansion for China, Japan, Korea, Europe and the United States.

When is the International Bunsen discussion meeting on solid-state batteries VI?

We cordially invite you join us for the International Bunsen Discussion Meeting on Solid-State Batteries VI - From Fundamentals to Application! This in-person event will take place on November 13 - 15, 2024 in Frankfurt, Germany and follows the very successful series of conferences held at Frankfurt airport (HOLM) since 2014.

Are solid-state batteries the future of battery technology?

Solid-state batteries are well positioned to be the breakthrough that will help to propel advanced battery technologies to the next level of global adoption.

Can isostatic pressing lead to large-scale production of SSBs?

Herein, our team comprehensively discussed and highlighted isostatic pressing as a potential pathway toward this goal of large-scale production of SSBs and their components. As we continue to innovate on materials and interfaces within the solid-state battery, it is crucial to keep a lens on the manufacturing aspects of these systems.

Can isostatic pressing be used in the SSB field?

Isostatic pressing has seen limited application in the SSB field thus far. To date, the majority of the implementation of ISP techniques is for densification of green pellets prior to their sintering (Supporting Information).

What is isostatic pressing (ISP)?

In this regard, isostatic pressing (ISP) is a technique that has inherent versatility to cover the processing conditions required for most promising SE materials as well as the capability to achieve large-scale production. ISP can be employed for generating the thin, dense SE layers needed for practical SSBs.

1 Supporting Information: The Role of Isostatic Pressing in Large-Scale Production of Solid-State Batteries  
Marm Dixit<sup>1,a</sup>, Chad Beamer<sup>1,b,\*</sup>, Ruhul Amina, James Shipley<sup>c</sup>, Richard Eklund<sup>c</sup>, Nitin Muralidharana,  
Lisa Lindqvist<sup>b</sup>, Anton Fritz<sup>c</sup>, Rachid Essehlia, Mahalingam Balasubramaniana, Ilias Belharouaka,<sup>\*</sup> a  
Electrification & Energy Infrastructure Division, Oak Ridge National ...

Among the garnet-type all-solid-state ceramic battery assemblies in the ...

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Isostatic pressing, a technique that applies hydrostatic pressure to a material to improve its density and mechanical strength, has seen significant growth and development over the years. Isostatic pressing is commonly used for the consolidation of powders and defect healing of castings, making it a versatile process for a range of materials including ceramics, metals, ...

Ilias Belharouak, a corporate fellow at ORNL and head of its electrification section, said solid-state battery technology needs to be perfected for large-scale manufacturing. "Make no mistake, all solid-state batteries are on a journey for the long haul," he said. "But the isostatic pressing technology, if scalable, would provide a way to ...

With significant increases in energy density and vastly improved safety, solid-state batteries show significant promise if their costs can be brought in line with other competing battery chemistries. What will it take to bring solid-state batteries down to a \$100 kw/hr at the cell level and when can that be achieved. This unique summit will cover the global solid-state battery ecosystem from ...

The effect of cold isostatic press (CIP) on solid polymer electrolyte (SPEs) ...

Isostatic Pressure in Research & Production of Solid-State Batteries. In this webinar we ...

Scalable processing of solid-state battery (SSB) components and their integration is a key bottleneck toward the practical deployment of these systems. In the case of a complex system like a SSB, it becomes increasingly vital to envision, develop, and streamline production systems that can handle different materials, form factors, and chemistries as well ...

In this webinar we will present on how isostatic pressing technology from Quintus Technologies ...

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Isostatic pressing (ISP) enables large-scale production of solid electrolyte materials, addressing scalability challenges in solid-state battery technology. Till innehåller;ll Skip to content

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# Isostatic Pressed Solid-State Battery Technology Conference

This workshop will discuss the status in the development of next generation solid state electrolytes, hybrid organic and inorganic electrolytes, elemental anodes and high voltage and capacity electrodes and understanding of limitation of both individual component and interface aspects of combination of battery materials. World leading battery ...

This workshop will discuss the status in the development of next generation ...

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